Novel Plasmonic Devices

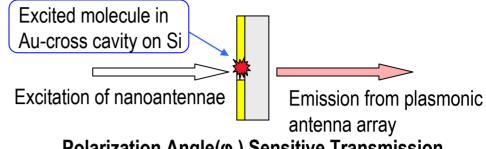
Motivation:

To guide and manipulate light over deep subwavelength dimensions using the unique properties of surface plasmons and localized plasmon resonances.

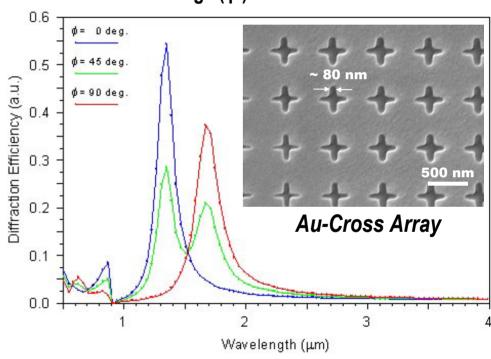
Result and Significance:

Plasmonic technology is needed for subwavelength optical structures, which connect the molecular and macroscopic optical domains. The device simulations here show transmission. characteristics of a first-generation polarizationsensitive plasmonic nanoantenna array for resonant molecular excitation and emission, made using electron beam lithography and ion milling.

PI: R. Osgood, Columbia University Publication: None, Research in Progress



Polarization Angle(φ) Sensitive Transmission



CFN Staff: John Warren Facility: Nanopatterning







